

- Find the intercepts of the graph of a linear equation.
- Use intercepts to make a quick graph of a linear equation

1. What is your name?

Find the x-intercept of the graph of the equation.

2.  $3x - y = 6$

$x = 2$

3.  $5x + 5y = -30$

$x = -6$

4.  $1.5x - 3y = -6$

$x = 4$

5.  $0.8x + 3y = 2.4$

$x = 3$

Find the y-intercept of the graph of the equation.

6.  $y = \frac{1}{2}x + 8$

$y = 8$

7.  $4x + 2y = -16$

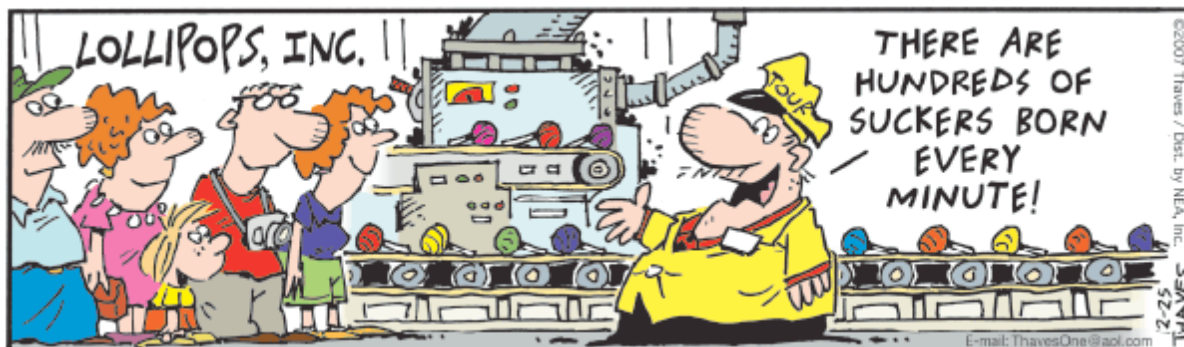
$y = -8$

8.  $y = x - \frac{2}{3}$

$y = -\frac{2}{3}$

9.  $5x - 1.2y = 3.6$

$y = 3$

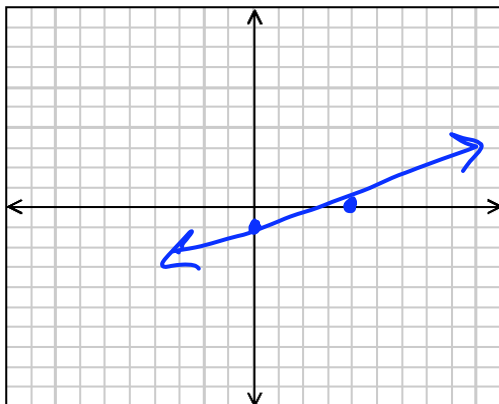


**Sketch the line that has the given intercepts.**

**10.**

$x$ -intercept: 4

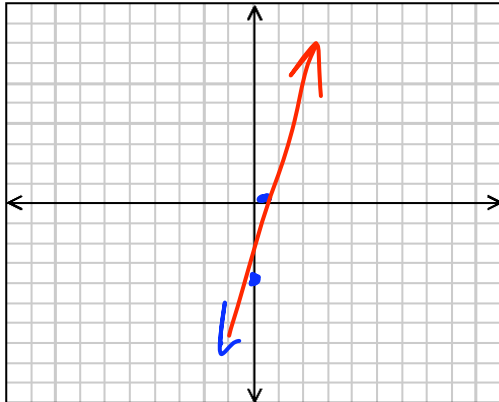
$y$ -intercept:  $-1$



**11.**

$x$ -intercept:  $\frac{1}{2}$

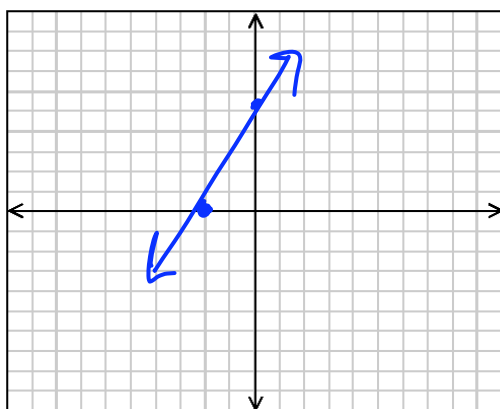
$y$ -intercept:  $-4$



**12.**

$x$ -intercept:  $-2$

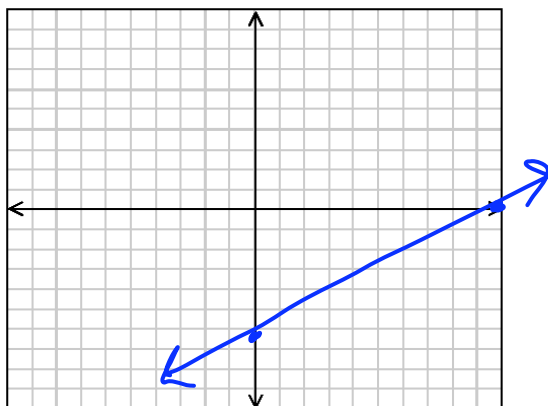
$y$ -intercept: 5



13.

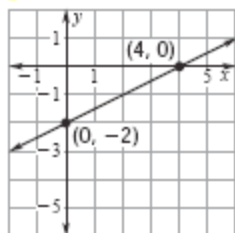
$x$ -intercept: 10

$y$ -intercept:  $-6.5$

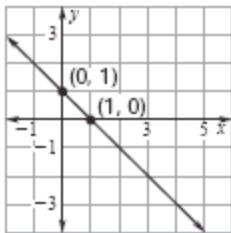


Find the  $x$ -intercept and the  $y$ -intercept of the line. Graph the equation. Label the points where the line crosses the axes.

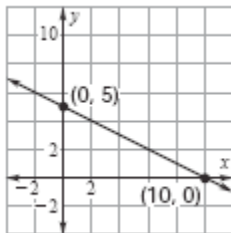
14.  $-4x + 8y = -16$



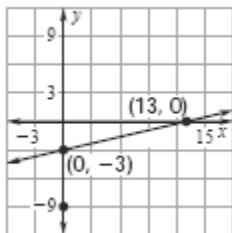
15.  $y = 1 - x$



16.  $y = -0.5x + 5$



17.  $0.3x - 1.3y = 3.9$

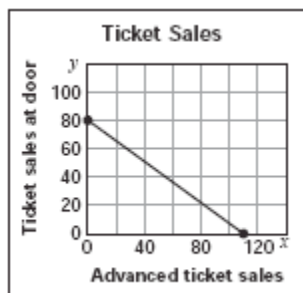


**Ticket Sales** Use the following information. You sold tickets to the school play. Advanced tickets were \$4. Tickets bought at the door were \$5.50. Total ticket sales were \$440. Let  $x$  represent the number of advanced tickets sold and  $y$  represent the number of tickets sold at the door.

18. Write an equation to represent the number of tickets sold.

$$4x + 5.5y = 440$$

19. Graph the equation.

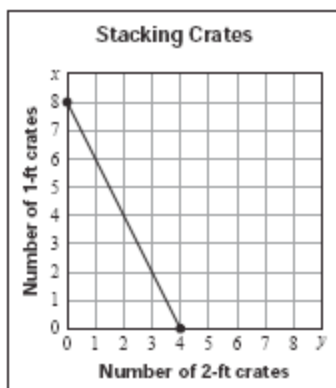


20. What are three possible numbers of advanced tickets sold and tickets sold at the door?



**Stacking Crates** Use the following information. As a part of a summer job, you stack crates. The crates have the same length and width, but have heights of 1 or 2 feet. Using a fork lift, you can stack the crates 8 feet high.

21. Make a graph showing the possible number of each type of crate in one stack.



22. If you stacked 3 of the 2-foot crates, how many of the 1-foot crates were in the stack?

2

### Mixed Review.

Find the difference. (Chapter 2 Section 3)

23.  $-8 - 9$

-17

24.  $7 - |-1|$

6

25.  $|8| - 12.6$

-4.6

26.  $-4.1 - (-5.1)$

1

Find the quotient. (Chapter 2 Section 7)

27.  $12 \div \left(-\frac{1}{5}\right)$

-60

28.  $-20 \div \left(-2\frac{1}{2}\right)$

8

29.  $3 \div \frac{1}{4}$  12

30.  $\frac{1}{8} \div \frac{1}{2}$   $\frac{1}{4}$

31. B You have one hour to make cookies for your school bake sale. You spend 20 minutes mixing the dough. It then takes 12 minutes to bake each tray of cookies. If you bake one tray at a time, which model can you use to find how many trays you can bake? (Chapter 3 Section 3)

A.  $x(20 + 12) = 60$

B.  $12x + 20$